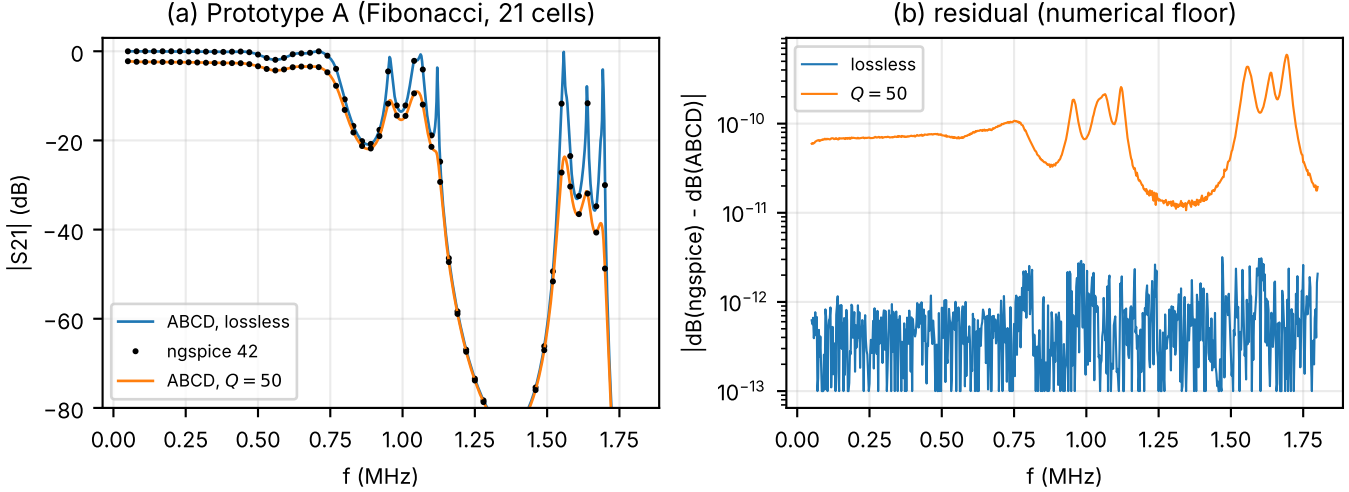

(a) Prototype A (Fibonacci, 21 cells)
|S21| (dB)
0
−20
−40
−60
−80
0.00
0.25
0.50
0.75
1.00
1.25
1.50
1.75
f (MHz)
ABCD, lossless
ngspice 42
ABCD, Q = 50
(b) residual (numerical floor)
|dB(ngspice) - dB(ABCD)|
10^−10
10^−11
10^−12
10^−13
lossless
Q = 50
f (MHz)